

CLAIMS

1. A coded-data control device, comprising a data processing portion for inputting/outputting control data into/from a recording medium, a coded-data control portion for constructing, updating and recording control-data and a recording medium controller for outputting recording-medium control-data to control the reading/writing of control data from/into the recording medium and for outputting control-signals to cause the data processing portion to read/write control data from/into the recording medium, characterized in that wherein the coded-data control portion has a memory controller comprising a multiplexed-record control portion and a video-record control portion and/or an audio-record control portion and said controller allows the reading of only necessary data by random accessing.

2. A coded data control device as defined in claim 1, characterized in that a coded-data control portion is provided to control the accumulation of multiplexed coded-data in a recording medium, said multiplexed coded data comprising coded video-data obtained by high efficiently encoding video-data, coded audio-data obtained by high efficiently encoding audio-data and additional data for multiplexing the coded video-data with the coded audio-data, and said coded data control

portion uses, as a control key frame, a video frame coded by intraframe coding or prediction from a preceding frame and gives control data which comprises information on location of records of one or two or all of the coded video-data, coded audio-data and multiplexed coded-data, respectively, corresponding to a key frame and an information on linking with preceding and succeeding coded-data, and the control data is stored in a specified area of the recording medium separately from the coded data.

3. A coded data control device as defined in claim 2, characterized in that the information on location of a record of coded video-data in the recording medium indicates a head position or a tail position or both head and tail positions of the coded video-data of the key frame, the information on location of a record of coded audio-data in the recording medium indicates a head position or a tail position or both head and tail positions of the coded audio-data corresponding to the key frame, the information on location of a record of multiplexed coded-data in the recording medium indicates a head position of the multiplexed data which is first recorded one of either the coded video-data of the key frame or the coded audio-data corresponding to the key frame.

4. A coded data control device as defined in claim 3,

characterized in that the information on location of a record of multiplexed data in the recording medium is used at synchronous reproduction of a video output and an audio output and the information on location of a record of coded video-data is used at reproduction of a video output only.

5. A coded data control device as defined in any one of claims 3 and 4, characterized in that a coded-data control portion has a first memory for storing a first table, a second memory for storing a second table, a third memory for storing a third table and a memory controller for control of control data stored in the first, second and third memories; the control data in the first table is used for control of a video sequence in the first table, the control data in the second table is used for control of a memory area of the video sequence in the recording medium, the control data in the third table is used for control of the location of records of the coded video-data or coded audio-data or multiplexed coded-data in the recording medium corresponding to that in the key frame; and an linking information for the control data is composed of a pointer indicating a linking order of data in each table and a pointer indicating the second table data corresponding to the first table data and a pointer indicating the third table data corresponding to the

second table data.

6. A coded data control device as defined in any one of claims 3 and 4, characterized in that a coded-data control portion has a first memory for storing a first table, a second memory for storing a second table, a fourth memory for storing a fourth table, a fifth memory for storing a fifth table and a memory controller for control of control data stored in the first, second, fourth and fifth memories; the control data in the first table is used for control of a video-sequence, the control data in the second table is used for control of a memory area of the video-sequence in the recording medium, the control data in the fourth table is used for control of location of records of the coded video-data or coded audio-data or multiplexed coded-data in the recording medium corresponding to the intraframe-coded key frame and the control data in the fifth table is used for control of location of records of the coded video-data or coded audio-data or multiplexed coded-data in the recording medium corresponding to the key frame coded by prediction from a preceding frame; and an information for linking the control data is composed of a pointer indicating an order of linking the data in each table, a pointer indicating the second table data corresponding to the first table data, a pointer indicating the fourth table

data corresponding to the second table data and a pointer indicating the fifth table data corresponding to the fourth table data.

7. A coded data control device as defined in any one of claims 5 and 6, characterized in that each of words in the first table through the fifth table is provided a flag indicating whether it is used or unused.

8. A coded data control device as defined in any one of claims 1 to 7, characterized in that in case of no control data being contained in the recording medium, the multiplexed coded data is read from the recording medium and control data are constructed from the multiplexed data.

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